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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,768	06/20/2005	Hee Sook Shin	HI-0185	6478

34610 7590 06/22/2007  
KED & ASSOCIATES, LLP  
P.O. Box 221200  
Chantilly, VA 20153-1200

EXAMINER
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NOORISTANY, SULAIMAN

ART UNIT	PAPER NUMBER
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2109

MAIL DATE	DELIVERY MODE
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06/22/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/539,768	Applicant(s) SHIN ET AL.	
	Examiner Sulaiman Nooristany	Art Unit 2109	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>06/20/2005,08/01/2005</u> . | 6) <input type="checkbox"/> Other: ____.  |

**Detailed Action**

1. This Office Action is response to the application (10/539,768) filed on 20, June 2005.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 3, 5 and 6 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. However the claims will be given a broad reasonable interpretation for the purposes of examination as best understood.

4. In regards to claim 6, applicant claims "*the block not being the index in to the body*" that lacks antecedent basis due to the fact that "*the block not being the index in to the body*" is not properly referenced as it is unknown what "*the block not being the index in to the body*" is referring to since claim 6 dependent upon claim 3. Further it cannot be determined to which block is referred to at line 10 of claim 6.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a), which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Huang et al. U.S Patent No. US 7,120,702** in view of **Smith et al. U.S Patent No. US 6,970,602**.

7. Regarding claim 1 and 3, Huang teaches wherein a web content converting system for a large display screen web document into a small display web document [A computer-implemented method and system for processing transactions between a client device and a web page, Abstract, lines 1-2] the system comprising: A preprocessor for standardizing a non-standard web document having an erroneous tag to output the standardized web document in a data format suitable for analysis [The transcoder also transforms the data into a standardized form so that the adapter can then modifying the standardized data into a compatible form for display by the client device (Abstract, lines 10-13)]; A client profile analyzer for extracting and managing client information [For each type of client device, or user preference, a corresponding adapter is used to interpret the user request and properly transcode the relevant web content, Col. 3, line-67, Col. 4, lines 1-2)]; A structure analyzer for receiving the web document standardized in the preprocessor to set the web document to a content unit piece (component)

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according to set the document analysis algorithm [The transcoder uses this rule to extract data from the web page and to transform the web page into a standardized form. Each rule may be applied to a plurality of web pages on a given web site, Col. 4, lines 36-38), a machine component that renders the program code elements in a form that instructs a digital processing apparatus (that is, a computer) to perform a sequence of function, Col. 4, lines 24-27)];

an index generator for extracting information on image or text index from the component block categorized into the index portion, and generating a script file and an additional tag collection for expressing for expressing the extracted information [web pages are categorized into one of a plurality of service domains and their associated services (Col. 4, lines 52-54), Fig. 2A & 2B];

a voice mark-up generator for converting a text-converting a text-centered body content block into a voice mark-up language to perform a voice supporting function; and

a-Hyper Text Mark-up Language (HTML) generator for rearranging and reconstructing the generated content object elements according to a content object element according to a document pattern to generate the small display screen web document [PatML is a pattern/match replacement tool for XML documents, which allows a user to specify how an XML document can be transformed for browsing on other programs. A PatML rule specifies an XML pattern to match and how to transform the pattern. Each PatML rule matches a specific pattern in an HTML page and transforms this pattern into a new XML fragment (Col. 5, lines 54-61)]

With respect to claim 1, Huang shows all the features of the instant claimed

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invention except for the specific detail of "An image converter for extracting information on an image encoding/decoding procedure and an image size included in the web document; A component block extractor for grouping the set content unit piece (component) to similar group within a range not exceeding a maximal width by using an attribution value of the content unit piece (component) and client performance information; A component block categorizer for categorizing each of component blocks generated by the component block extractor into index and body Content portions in accordance with a content characteristic; a voice mark-up generator for converting a text-converting a text-centered body content block into a voice mark-up language to perform a voice supporting function." Smith teaches that is well known to have An image converter for extracting information on an image encoding/decoding procedure and an image size included in the web document [There are many ways in which a transcoder can adapt content to the client device, such as by data compression, summarization and media conversion (Col. 2, lines 5-7)]; A component block extractor for grouping the set content unit piece (component) to similar group [Fig. 8, This processing can separate out different items in a Web document such as text bodies, Java applets, images, animations and embedded video. After multimedia object separation, the individual multimedia objects can be analyzed and transcoded independently, can be analyzed and grouped for transcoding, or can be further broken down into individual modalities (Col. 5, lines 9-15)], within a range not exceeding a maximal width (images using the measure of the mean saturation per pixel (Col. 8, lines 49-50) by using an attribution value of the content unit piece (component) and client

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performance information [The system can also extracts a number of image attributes, such as image width (Col. 11, lines 28-29), Fig. 9]. A component block categorizer for categorizing each of component blocks generated by the component block extractor into index and body Content portions in accordance with a content characteristic [The separation process may involve analysis of the multimedia material to determine file formats, MIME types, and other information that influences the separation. This processing can separate out different items in a Web document such as text bodies, Java applets, images, animations and embedded video (Col. 5, lines 6-11)], a voice mark-up generator for converting a text-centered body content block into a voice mark-up language to perform a voice supporting function [converting text to speech; converting audio to text through speech recognition; converting text from one language to another; summarizing text passages; and so forth (Co. 4, lines 42-45)]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Huang's invention by transcoding the web content to small display, as taught by Smith. Smith provides the advantage of coupling content analysis with transcoding the content could be better adapted to constraints in delivery, display, processing and storage (col. 2, lines 45-47). Further, transcoding can be found in many areas of content adaptation however it is commonly used in the area of mobile phones content adaptation. In the world of mobile content, transcoding is a must due to the diversity of mobile devices. This diversity requires an intermediate state of content adaptation in order to make sure that the source content will adequately present on the target device it is sent to. Transcoding can also refer to the encoding of files to a lower

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bitrate without changing video formats, a process that is also known as transrating. when using a camera phone to take a digital picture you are actually creating a high resolution JPEG image, usually at least 640x480 with 24 bits of color. However when sending the image to another phone this high resolution image might be transcoded to a lower resolution image with less amount of color in order to better fit the target device's screen size and color limitation. This size and color reduction not only improves the user experience on the target device but is sometimes the only way for content to be sent between different devices (as taught by Smith).

8. Regard claim 2, Huang together with Smith taught the method according to claim 1 as described above. Smith further teaches wherein "the web content converting system is installed at any one of three layers a web server, a client and a proxy" [The transcoding mechanism can be deployed in a number of ways in a networked system, including deployment at a server or at the client. Alternatively, the transcoding system can be deployed at a proxy, which retrieves the content from the content server (Col. 1, lines 50-54)].

9. Regard claim 4, Huang together with Smith taught the method according to claim 3 as described above. Smith further teaches wherein "in the web document analyzing step, a tag such as <TABLE>, <TR>, <TD>, <IMG>, etc. is mainly analyzed [The system can also use a dictionary of terms extracted from the text related to the images. The terms are extracted from the "alt" tag text, the image URL address strings, and the text nearby the images in the Web documents (Col. 11, lines 23-27)], and a specific tag is



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defined as a component to be used as a minimal unit for the Content unit analysis" [The system can make use of terms such as D=["ad", "texture", "bullet", "map", "logo", "icon" (Col. 11, lines 27-28), The features can be extracted only as needed for the tests in order to minimize processing (Col. 8, lines 37-39)].

10. Regard claim 5, Huang together with Smith taught the method according to claim 3 as described above. Smith further teaches wherein "in the component, block setting step, a component tree is inputted to check initial width information for all component nodes, and it is checked whether or not a sibling node of a current component node exists, and if existing, similar sibling nodes are bundled and grouped within the range [Fig. 8, tree decision, The separation process may involve analysis of the multimedia material to determine file formats, MIME types, and other information that influences the separation. This processing can separate out different items in a Web document such as text bodies, Java applets, images, animations and embedded video (Col. 5, lines 6-11)], not exceeding the maximal width (Max-WIDTH)" [(images using the measure of the mean saturation per pixel (Col. 8, lines 49-50)].

11. Regard claim 6, Huang together with Smith taught the method according to claim 3 as described above. Smith further teaches wherein "the component block categorizing step comprises the step of; receiving a component block tree to visit all component block while to compare a content pattern of the component block [The separation

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process may involve analysis of the multimedia material to determine file formats, MIME types, and other information that influences the separation (Col. 5, lines 6-10)]

determining an index type if resultant value of the pattern comparison exceeds a certain critical value [(images using the measure of the mean saturation per pixel (Col. 8, lines 49-50)];

setting a type of the index-determined block to each of an image index (INDEX\_I) or a text index (INDEX\_T) depending on whether a data type of the content is an image or a text [In the analysis process, the document can be separated into objects such as photos, graphics and text. Each of the objects can be analyzed separately as illustrated in FIG. 2]; and

categorizing the block not being the index into the body, and categorizing the voice body (BODY\_V) for performing the converting into the voice supporting document and the general body (BODY\_G) processed as other general content blocks [converting text to speech; converting audio to text through speech recognition; converting text from one language to another; summarizing text passages; and so forth (Co. 4, lines 42-45)].

**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent 6,925,595 to Whittedge et al.

US Patent 7,054,952 to Schwerdtfeger et al.

US Patent 6,665,642 to Kanevsky et al.

US Patent 6,563,517 to Bhagwat et al.


US Patent 7,120,897 to Ebbo et al.

US Patent App. 2002/0046262 to Heilig et al.

US Patent App. 2002/0065922 to Shastri, Vijnan

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sulaiman Nooristany whose telephone number is (571) 270-1929. The examiner can normally be reached on M-F from 9 to 5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Pwu, can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sulaiman Nooristany 6/13/2007

  
James K. Trujillo  
PRIMARY EXAMINER  
TC 2100